

CLAIMS

1. A method for generating a test script associated with a virtual telephone caller system used
5 to test a contact center, the method comprising:
 - receiving a test script having one or more test script portions; and
 - associating script parameters at a first time with at least one of the test script and at least one of the test script portions, wherein the script parameters are related to a behavior of the test script that allows the test script to provide two or more of a functional test, a load test, and a
10 monitoring test.
2. The method of Claim 1, wherein the functional test corresponds to a test of the contact center which can be run at a time corresponding to a time of formation of the contact center or to a time of adding new features to the contact center in order to test the general function of the
15 contact center.
3. The method of Claim 1, wherein the load test corresponds to a test of the contact center which can be run while the contact center is in operation and which applies a plurality of simulated telephone calls to the contact center in order to test the load handling capability of the
20 contact center.
4. The method of Claim 1, wherein the monitoring test corresponds to a test of the contact center which is run from time to time or continually while the contact center is in operation in order to continually test the general functions of the contact center.
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5. The method of Claim 1, wherein the first time corresponds to a time after the test script is generated.
6. The method of Claim 1, wherein the script parameters include at least one of a logging

value, a threshold value, a channel value, an alerting enable value, an alerting options value, a delay time value, a relative weight value, a duration value, a start calls-per-minute (cpm) value, a stop cpm value, a start time value, a stop time value, a recurrence pattern value, and a recurrence value.

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7. The method of Claim 6, wherein the logging value corresponds to a binary value that indicates whether logging of data is to be performed, the threshold value corresponds to a value associated with a test of the contact center which is used to determine fail data, the channel value corresponds to a telephone channel used to provide a test to the contact center, the alerting enable value corresponds to a binary value which turns alerting on or off, the alerting options value corresponds to an action to be taken in the event of a test failure, the delay time value corresponds to a delay time before an associated test is performed, the relative weight value corresponds to a percentage of time associated with a test script corresponding to the relative amount of time during a test that the test script will run in a group of tests, the duration value corresponds to the total duration of a test, the start cpm value corresponds to the number of calls per time at the beginning of a test, the stop cpm value corresponds to the number of calls per time at the end of a test, the start time value corresponds to a time at which a test is started, the stop time value corresponds to a time at which a test is ended, the recurrence pattern value corresponds to a gross time interval at which a test is run, and the recurrence value corresponds to a fine time interval at which a test is run.

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8. The method of Claim 1, further including:

associating the test script with two or more test groups at a second time, each test group associated with one of the functional test, the load test, and the monitoring test; and

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associating group parameters with each of the at least two test groups at the second time.

9. The method of Claim 8, wherein the second time corresponds to a time after the test script is generated.

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10. The method of Claim 8, wherein the group parameters include at least one of a logging

value, a threshold value, a channel value, an alerting enable value, an alerting options value, a delay time value, a relative weight value, a duration value, a start calls-per-minute (cpm) value, a stop cpm value, a start time value, a stop time value, a recurrence pattern value, a recurrence pattern value, and a recurrence value.

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11. The method of Claim 10, wherein the logging value corresponds to a binary value that indicates whether logging of data is to be performed, the threshold value corresponds to a value associated with a test of the contact center which is used to determine fail data, the channel value corresponds to a telephone channel used to provide a test to the contact center, the alerting enable value corresponds to a binary value which turns alerting on or off, the alerting options value corresponds to an action to be taken in the event of a test failure, the delay time value corresponds to a delay time before an associated test is performed, the relative weight value corresponds to a percentage of time associated with a test script corresponding to the relative amount of time during a test that the test script will run in a group of tests, the duration value corresponds to the total duration of a test, the start cpm value corresponds to the number of calls per time at the beginning of a test, the stop cpm value corresponds to the number of calls per time at the end of a test, the start time value corresponds to a time at which a test is started, the stop time value corresponds to a time at which a test is ended, the recurrence pattern value corresponds to a gross time interval at which a test is run, and the recurrence value corresponds to a fine time interval at which a test is run.

12. The method of Claim 1, further including:

associating one or more additional script parameters with the test script at a third time;

and

generating the test script having the one or more test script portions.

13. The method of Claim 12, wherein the third time corresponds to a time of the generating the test script.

30 14. The method of Claim 12, wherein the additional script parameters include at least one of a

logging value, threshold value, a channel value, an alerting enable value, an alerting options value, a delay time value, a relative weight value, a duration value, a start calls-per-minute (cpm) value, a stop cpm value, a start time value, a stop time value, a recurrence pattern value, and a recurrence value.

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15. The method of Claim 14, wherein the logging value corresponds to a binary value that indicates whether logging of data is to be performed, the threshold value corresponds to a value associated with a test of the contact center which is used to determine fail data, the channel value corresponds to a telephone channel used to provide a test to the contact center, the alerting enable value corresponds to a binary value which turns alerting on or off, the alerting options value corresponds to an action to be taken in the event of a test failure, the delay time value corresponds to a delay time before an associated test is performed, the relative weight value corresponds to a percentage to time associated with a test script corresponding to the relative amount of time during a test that the test script will run in a group of tests, the duration value corresponds to the total duration of a test, the start cpm value corresponds to the number of calls per time at the beginning of a test, the stop cpm value corresponds to the number of calls per time at the end of a test, the start time value corresponds to a time at which a test is started, the stop time value corresponds to a time at which a test is ended, the recurrence pattern value corresponds to a gross time interval at which a test is run, and the recurrence value corresponds
15. to a fine time interval at which a test is run.

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16. A computer program medium having computer readable code thereon for testing a contact center, the medium comprising:

25 instructions for receiving the test script having one or more test script portions; and
 instructions for associating script parameters at a first time with at least one of the test script and at least one of the test script portions, wherein the script parameters are related to a behavior of the test script that allows the test script to provide two or more of a functional test, a load test, and a monitoring test.

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17. The computer program medium of Claim 16, wherein the functional test corresponds to a test of the contact center which can be run at a time corresponding to a time of formation of the contact center or to a time of adding new features to the contact center in order to test the general function of the contact center.

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18. The method of Claim 16, wherein the load test corresponds to a test of the contact center which can be run while the contact center is in operation and which applies a plurality of simulated telephone calls to the contact center in order to test the load handling capability of the contact center

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19. The method of Claim 16, wherein the monitoring test corresponds to a test of the contact center which is run from time to time or continually while the contact center is in operation in order to continually test the general functions of the contact center.

15 20. The computer program medium of Claim 16, wherein the first time corresponds to a time after the test script is generated.

20 21. The computer program medium of Claim 16, wherein the script parameters include at least one of a logging value, a threshold value, a channel value, an alerting enable value, an alerting options value, a delay time value, a relative weight value, a duration value, a start calls-per-minute (cpm) value, a stop cpm value, a start time value, a stop time value, a recurrence pattern value, and a recurrence value.

25 22. The computer program medium of Claim 21, wherein the logging value corresponds to a binary value that indicates whether logging of data is to be performed, the threshold value corresponds to a value associated with a test of the contact center which is used to determine fail data, the channel value corresponds to a telephone channel used to provide a test to the contact center, the alerting enable value corresponds to a binary value which turns alerting on or off, the alerting options value corresponds to an action to be taken in the event of a test failure, the delay time value corresponds to a delay time before an associated test is performed, the relative weight

value corresponds to a percentage to time associated with a test script corresponding to the relative amount of time during a test that the test script will run in a group of tests, the duration value corresponds to the total duration of a test, the start calls-per-minute (cpm) value corresponds to the number of calls per time at the beginning of a test, the stop cpm value

5 corresponds to the number of calls per time at the end of a test, the start time value corresponds to a time at which a test is started, the stop time value corresponds to a time at which a test is ended, the recurrence pattern value corresponds to a gross time interval at which a test is run, and the recurrence value corresponds to a fine time interval at which a test is run.

10 23. The computer program medium of Claim 16, further including:
instructions for associating the test script with two or more test groups at a second time, each test group associated with one of the functional test, the load test, and the monitoring test; and

15 instructions for associating group parameters with each of the at least two test groups at the second time.

24. The computer program medium of Claim 23, wherein the second time corresponds to a time after the test script is generated.

20 25. The computer program medium of Claim 23, wherein the group parameters include at least one of a logging value, a threshold value, a channel value, an alerting enable value, an alerting options value, a delay time value, a relative weight value, a duration value, a start calls-per-minute (cpm) value, a stop cpm value, a start time value, a stop time value, a recurrence pattern value, a recurrence value, and an alerting enable value

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26. The computer program medium of Claim 25, wherein the logging value corresponds to a binary value that indicates whether logging of data is to be performed, the threshold value corresponds to a value associated with a test of the contact center which is used to determine fail data, the channel value corresponds to a telephone channel used to provide a test to the contact center, the alerting enable value corresponds to a binary value which turns alerting on or off, the

alerting options value corresponds to an action to be taken in the event of a test failure, the delay time value corresponds to a delay time before an associated test is performed, the relative weight value corresponds to a percentage to time associated with a test script corresponding to the relative amount of time during a test that the test script will run in a group of tests, the duration value corresponds to the total duration of a test, the start cpm value corresponds to the number of calls per time at the beginning of a test, the stop cpm value corresponds to the number of calls per time at the end of a test, the start time value corresponds to a time at which a test is started, the stop time value corresponds to a time at which a test is ended, the recurrence pattern value corresponds to a gross time interval at which a test is run, and the recurrence value corresponds to a fine time interval at which a test is run.

27. The computer program medium of Claim 16, further including:
instructions for associating one or more additional script parameters with the test script at
a third time; and
generating the test script having the one or more test script portions.

28. The computer program medium of Claim 27, wherein the third time corresponds to a time
of the generating the test script.

29. The computer program medium of Claim 27, wherein the additional script parameters
include at least one of a logging value, threshold value, a channel value, an alerting enable value,
an alerting options value, a delay time value, a relative weight value, a duration value, a start
calls-per-minute (cpm) value, a stop cpm value, a start time value, a stop time value, a recurrence
value.

30. The computer program medium of Claim 29, wherein the logging value corresponds to a
binary value that indicates whether logging of data is to be performed, the threshold value
corresponds to a value associated with a test of the contact center which is used to determine fail
data, the channel value corresponds to a telephone channel used to provide a test to the contact
center, the alerting enable value corresponds to a binary value which turns alerting on or off, the

alerting options value corresponds to an action to be taken in the event of a test failure, the delay time value corresponds to a delay time before an associated test is performed, the relative weight value corresponds to a percentage to time associated with a test script corresponding to the relative amount of time during a test that the test script will run in a group of tests, the duration 5 value corresponds to the total duration of a test, the start cpm value corresponds to the number of calls per time at the beginning of a test, the stop cpm value corresponds to the number of calls per time at the end of a test, the start time value corresponds to a time at which a test is started, the stop time value corresponds to a time at which a test is ended, the recurrence pattern value corresponds to a gross time interval at which a test is run, and the recurrence value corresponds 10 to a fine time interval at which a test is run.

31. An apparatus for testing a contact center, comprising:
a graphical user interface adapted to allow a user to provide script parameters to a test
script to allow the test script to be run in two or more of a functional test, a load test, and a
15 monitoring test associated with the contact center.

32. The method of Claim 31, wherein the functional test corresponds to a test of the contact center which can be run at a time corresponding to a time of formation of the contact center or to a time of adding new features to the contact center in order to test the general function of the
20 contact center.

33. The method of Claim 31, wherein the load test corresponds to a test of the contact center which can be run while the contact center is in operation and which applies a plurality of simulated telephone calls to the contact center in order to test the load handling capability of the
25 contact center.

34. The method of Claim 31, wherein the monitoring test corresponds to a test of the contact center which is run from time to time or continually while the contact center is in operation in order to continually test the general functions of the contact center.